

COMPLETE LISTING OF ALL CLAIMS WITH CURRENT STATUS AND MARKINGS TO SHOW CHANGES

1. (currently amended) A method of evaluating the compositional characteristics of an entire corn plant predicting the compositional characteristics of a corn plant population, the method comprising:

- (a) selecting a population of mature corn plants to be evaluated;
- (b) selecting a limited number of representative plants from the population <u>based on visually surveyed characteristics</u>;
 - (c) harvesting the representative plants;
 - (d) grinding the representative plants into a homogeneous mixture;
- (e) analyzing a sample of the homogeneous mixture in a near infrared spectrometer; and
- (f) comparing the analysis with an existing correlation between near infrared analyses and wet-chemistry tested nutritional compositional characteristics to predict the compositional characteristics of the corn plant population.
- 2. (currently amended) The method of claim 1 wherein at least three representative plants from the population are selected based on visually surveyed characteristics.
- 3. (original) The method of claim 1 wherein the representative plants are harvested at physical maturity.
- 4. (original) The method of claim 1 wherein the representative plants are ground in a bowl grinder.
- 5. (original) The method of claim 1 wherein the sample is analyzed by scanning at a plurality of locations.